- 21. (Amended) A method of inducing a protective immune response, said method comprising orally administering to a subject therapeutically effective amounts of at least a first and a second subpopulation of microparticles, wherein each of said microparticles comprises an antigen entrapped or encapsulated by a biocompatible, biodegradable polymer, and wherein the antigen in the microparticles of one subpopulation is different than the antigen in the microparticles of the second subpopulation and at least 50% of the microparticles are less than $5\mu m$.
- 22. (Amended) The method of claim 21 wherein the microparticles are sized such that at least 50% of the microparticles are less than 3 μ m.
- 23. (Amended) The method of claim 21 wherein the biocompatible, biodegradable polymer comprises a copolymer of lactic acid or an enantiomer of lactic acid with glycolic acid or an enantiomer of glycolic acid.
- 24. (Amended) The method of claim 21 wherein the antigen in the first subpopulation of microparticles is a *B. pertussis* antigen and the antigen in the first subpopulation of microparticles is a *B. pertussis* antigen.



25. (Amended) The method of claim 24 wherein the *B. pertussis* antigens are selected from the group consisting of inactivated pertussis toxin (PTd), filamentous hemaglutinin (FHA) and pertactin.

- 27. (Amended) The method of claim 21 wherein both the antigen in the first subpopulation of microparticles and the antigen in the second subpopulation of microparticles are selected from the group consisting of inactivated pertussis toxin (PTd), filamentous hemaglutinin (FHA) and pertactin.
- 28. (Amended) A method of inducing a protective immune response, said method comprising orally administering to a subject therapeutically effective amounts of at least a first and a second subpopulation of nanoparticles, wherein each of said nanoparticles comprises an antigen entrapped or encapsulated by a biocompatible, biodegradable polymer, and wherein the antigen in the nanoparticles of one subpopulation is different than the antigen in the nanoparticles of the second subpopulation and at least 50% of the nanoparticles are less than 600 nm.
- 29. (Amended) The method of claim 28 wherein the biocompatible, biodegradable polymer comprises a copolymer of lactic acid or an enantiomer of glycolic acid.

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- 30. (Amended) The method of claim 28 wherein the antigen in the first subpopulation of microparticles is a *B. pertussis* antigen and the antigen in the first subpopulation of microparticles is a *B. pertussis* antigen.
- 31. (Amended) The method of claim 30 wherein the *B. pertussis* antigen is selected from the group consisting of inactivated pertussis toxin (PTd), filamentous hemaglutinin (FHA) and pertactin.
- 33. (Amended) The method of claim 28 wherein both the antigen in the first subpopulation of microparticles and the antigen in the second subpopulation of microparticles is selected from the group consisting of inactivated pertussis toxin (PTd), filamentous hemaglutinin (FNA) and pertactin.
- 35. (Amended) The method of claim 34 wherein the biocompatible, biodegradable polymer comprises a copolymer of lactic acid or an enantiomer of lactic acid with glycolic acid or an enantiomer of glycolic acid.
- 36. (Amended) A method of inducing a T_H2-polarized protective immune response against *B. pertussis*, comprising orally administering to a subject a pharmaceutically effective amount of nanoparticles sized such that at least 50% of the nanoparticles are less than 600nm, the nanoparticles comprising at least one *B. pertussis* antigen selected from the group consisting of inactivated pertussis toxin

(PTd), filmentous hemaglutinin (FHA) and pertactin, said antigen entrapped or encapsulated by a biocompatible, biodegradable polymer.

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37. (Amended) The method of claim 36 wherein the biocompatible, biodegradable polymer comprises a copolymer of lactic acid or an enantiomer of lactic acid with glycolic acid or an enantiomer of glycolic acid.

Please, add new claims 38-40 as follows:

38. A method of Claim 21 wherein the microparticles in each subpopulation were formed by coacervation.

39. A method of Claim 28 wherein the nanoparticles in each subpopulation were formed by coacervation.

40. A method of Claim 36 wherein the nanoparticles were prepared by coacervation.

Marked up version of Amended Claims

On page 11, please see **Version with markings to show changes made.**

REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.